

## **Adabas Administration Services Documentation**

**Adabas Administration Service User's Guide** 

Version 2.1.1

November 2016

This document applies to Adabas Administration Services Version 2.1.1.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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## **Preface**

This document describes Adabas Administration Services and explains how to use and maintain it.

It is intended for system administrators in your enterprise.

This document is organized as follows:

Concepts	Introduces you to Adabas Administration Services.
Release Notes	Describes the new and changed features in this version of Adabas Administration Services.
Installing and Uninstalling Adabas Administration Services	Describes the prerequisites of the Adabas Administration Services how to install it.
About the System Management Hub	Introduces you to the System Management Hub and explains how to access it and leave it.
Performing Adabas Administration Services Administration	Describes administrative tasks you can perform for Adabas Administration Services.
Using the aasutil Batch Program	Describes how to use the batch program, <i>aasutil.exe</i> , to perform some basic Adabas Administration Services administrative functions.
Using the adiutil Batch Program	Describes how to use the batch program, <i>adiutil.exe</i> , to perform some basic Directory Server functions for Adabas Administration Services.
Glossary	Provides a glossary of terms in use for Adabas and Entire Net-Work products.

# 1 Concepts

Understanding Partitioning	. 2
Understanding Filtering	. 3

Adabas Administration Services (AAS) provides remote administration and system service support for Software AG products. Specifically, Adabas Administration Services allows you to perform the following remote administration tasks for Software AG products with which it is supported:

- You can start and stop the product remotely.
- You can obtain product log files remotely.
- You can read and write product files remotely.
- You can read directories remotely.

In addition, Adabas Administration Services allows you to operate the Software AG product as a system service.

Ordinarily, Adabas Administration Services starts up automatically after it is installed or whenever the machine on which it is installed is started. In UNIX environments, however, you may occasionally need to start it manually.

Adabas Administration Services allows remote administration of Adabas databases through Adabas Manager. Once activated, Adabas Administration Services queries the local environment to determine which databases are active in that environment. It then makes target access entries in a Software AG Directory Server repository. These entries are then used by Adabas Manager as a communication path to the database for local or remote administration.

This chapter also covers the following topics:

## **Understanding Partitioning**

Adabas Administration Services supports partitioning of Software AG Directory Server entries. Partitioning enhances your ability to use one Directory Server for your whole enterprise, rather than separate Directory Servers for different departments within your enterprise. The partitions need to be managed separately, but only one Directory Server needs to be installed.

Once you have defined a service, you can assign it to a specific partition. If you specify one for a service, the Directory Server entries created for that service are stored in a partition by that name in the Directory Server configuration or in the service configuration file (depending on where the partition is defined); the entries in the partition are maintained separately from the other entries in the appropriate configuration. The service is only able to direct requests to databases, clients, and client hosts that have entries in this partition.

Here are some of the advantages of partitioning:

- You can use partitioning to direct Adabas Administration Services support to specific databases.
- If you have created Adabas databases with identical database IDs, you can use partitioning to correctly identify which client calls get directed to which Adabas database.

- You can use partitioning to group client calls to an Adabas database, thus reducing the number of actual connections required for that database. This provides you with some level of client control: if you want to remove access to a specific database for clients in a given partition, simply remove the access URL entry for that database (using the System Management Hub) or stop the service in that partition.
- Using SSL, you can use impose real security requirements on calls made by clients in specific partitions.

For complete information about partitioning, including an example, read *Partitioning a Directory Server* in the *Software AG Directory Server Installation and Administration Guide*.

## **Understanding Filtering**

Adabas Administration Services supports filtering of databases, client hosts, Entire Net-Work Client configurations, and Entire Net-Work Kernel definitions by Adabas database ID. Filtering is set up in the System Management Hub (SMH) using parameters on the **Service Filters** panel. For more information about this panel, read *Maintaining Adabas Administration Services Filters*, elsewhere in this guide.

You can filter services by requests:

- made to specific Adabas database IDs;
- submitted from Kernels, by Kernel name;
- submitted to and from specific machines, by machine name; and
- submitted from clients, by client name.

This section covers the following topics:

- Filtering Requests to Adabas Databases
- Filtering Requests from Other Kernels
- Filtering Requests to and from Specific Machines

Filtering Requests to and from Specific Clients

#### Filtering Requests to Adabas Databases

Using the **Service Filters** panel in SMH, you can identify databases for which requests should be processed by the service. If no databases are listed in the **ACCEPTED\_DBIDS** field, the service will process all requests to all databases defined in the Software AG Directory Server, except those listed in the **REJECTED\_DBIDS** field. Likewise, if no databases are listed in the **REJECTED\_DBIDS** field, the service will process all requests to all databases defined in the Software AG Directory Server, unless a specific list is provided in the **ACCEPTED\_DBIDS** field.

## Filtering Requests from Other Kernels

Using the **Service Filters** panel in SMH, you can identify Kernels for which requests should be processed by the service. If no Kernels are listed in the **ACCEPTED\_KERNELS** field, the service will process all requests to all Kernels, except those listed in the **REJECTED\_KERNELS** field. Likewise, if no Kernels are listed in the **REJECTED\_KERNELS** field, the service will process all requests to all Kernels, unless a specific list is provided in the **ACCEPTED\_KERNELS** field.

#### Filtering Requests to and from Specific Machines

Using the **Service Filters** panel in SMH, you can identify host machines for which requests should be processed by the service. If no host machines are listed in the **ACCEPTED\_HOSTS** field, the service will process all requests to all host machines, except those listed in the **REJECTED\_HOSTS** field. Likewise, if no host machines are listed in the **REJECTED\_HOSTS** field, the service will process all requests to all host machines, unless a specific list is provided in the **ACCEP-TED\_HOSTS** field.

#### Filtering Requests to and from Specific Clients

Using the **Service Filters** panel in SMH, you can identify clients for which requests should be processed by the service. If no clients are listed in the **ACCEPTED\_CLIENTS** field, the service will process all requests to all clients, except those listed in the **REJECTED\_CLIENTS** field. Likewise, if no clients are listed in the **REJECTED\_CLIENTS** field, the service will process all requests to all clients, unless a specific list is provided in the **ACCEPTED\_CLIENTS** field.

## 2 Release Notes

Enhancements	
End of Maintenance	
Documentation and Other Online Information	

Adabas Administration Services (AAS) provides remote administration and system service support for Software AG products.

This chapter describes the new and changed features of the 2.1 version of Adabas Administration Services.

## **Enhancements**

The primary enhancement in this release of the Adabas Administration Services is its installation using the Software AG Installer.

In addition, two new batch utility programs are now provided:

- Use the *aasutil.exe* batch utility program to perform Adabas Administration Services administration functions in a batch environment on the Adabas Administration Services installed on the local machine. For complete information, read *Using the aasutil Batch Program*, elsewhere in this section.
- Use the *adiutil.exe* batch utility program to obtain lists of databases, Adabas Administration Servicess, and Adabas Manager Communication Clients registered in a Directory Server. This utility can also be used to change the Directory Server used by the local Adabas Administration Services. For complete information, read *Using the adiutil Batch Program*, elsewhere in this section.

## **End of Maintenance**

For information on how long a product is supported by Software AG, access Software AG's Empower web site at <a href="https://empower.softwareag.com">https://empower.softwareag.com</a>.

Log into Empower. Once you have logged in, you can expand **Products** in the left menu of the web page and select **Product Version Availability** to access the Product Version Availability application. This application allows you to review support information for specific products and releases.

## **Documentation and Other Online Information**

The following online resources are available for you to obtain up-to-date information about your Software AG products:

- Software AG Documentation Website
- Software AG TECHcommunity
- Software AG Empower Product Support Website

#### Software AG Documentation Website

You can find documentation for all Software AG products on the Software AG Documentation website at <a href="http://documentation.softwareag.com">http://documentation.softwareag.com</a>. This site requires Empower credentials. If you do not have an Empower user ID and password yet, you will find instructions for registering on this site (free for customers with maintenance contracts) or you can also use the TECHcommunity website to access the latest documentation.

### **Software AG TECHcommunity**

You can find documentation and other technical information on the Software AG TECH community website at <a href="http://techcommunity.softwareag.com">http://techcommunity.softwareag.com</a>. You can:

- Access product documentation, if you have TECHcommunity credentials. If you do not, you will need to register and specify "Documentation" as an area of interest. If you already have TECHcommunity credentials, you can adjust your areas of interest on the TECHcommunity website by editing your TECHcommunity profile. To access documentation in the TECHcommunity once you are logged in, select **Documentation** from the **Communities** menu.
- Access articles, demos, and tutorials.
- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.
- Link to external websites that discuss open standards and web technology.

#### Software AG Empower Product Support Website

You can find product information on the Software AG Empower Product Support website at *ht-tps://empower.softwareag.com*. This site requires Empower credentials. If you do not have an Empower user ID and password yet, you will find instructions for registering on this site (free for customers with maintenance contracts).

To submit feature/enhancement requests, get information about product availability, and download products and certified samples, select **Products & Documentation** from the menu once you are logged in.

To get information about fixes and to read early warnings, technical papers, and knowledge base articles, select **Knowledge Center** from the menu once you are logged in.

# 3 Installing and Uninstalling Adabas Administration Services

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Adabas Administration Services is installed using the Software AG Installer. It does not require a license key.

One instance of Adabas Administration Services is required for each Adabas LUW installation to be managed. Adabas Administration Services will be automatically selected for installation when Adabas LUW is selected in the Software AG Installer tree. The service is installed and configured when the Adabas installation is activated.

You can download the Software AG Installer from the Software AG Empower website at <a href="https://empower.softwareag.com/">https://empower.softwareag.com/</a>.

This chapter provides product-specific instructions for installing Adabas Administration Services. It is intended for use with *Using the Software AG Installer*, which explains how to prepare your machine to use the Software AG Installer and how to use the Software AG Installer and Software AG Uninstaller to install and uninstall your products. The most up-to-date version of *Using the Software AG Installer* is always available in the webMethods product documentation located on the Software AG Empower website (https://empower.softwareag.com/).

This chapter covers the following topics:

## **Installation Overview**

This product is installed using the Software AG Installer, which you can download from the Software AG Empower website at <a href="https://empower.softwareag.com/">https://empower.softwareag.com/</a>.

The Software AG Installer offers typical development installations of Software AG products. When you select a typical development installation, the installer automatically groups and selects the Software AG products and components that make up that installation. The following are some typical installation configuration groupings of Adabas LUW (Linux/UNIX/Windows) and Entire Net-Work LUW products available in the Software AG Installer:

■ The Software AG Directory Server can be installed without installing any other Software AG products; it is not grouped with any other product. However, a Directory Server must already be installed before you attempt any other Adabas family product installations; the Directory Server installation location is requested during the installation of many Adabas family products.

If you have a Directory Server already installed at your site from an earlier release of Software AG products, you do not need to install it again; you can use the existing installation instead.

The Directory Server must be installed on a machine in your network that can be accessed by all machines where Entire Net-Work will be installed (both Entire Net-Work Server and Entire Net-Work Client). It should be installed on a dedicated system that is operational 24 hours a day, with a UPS.

We recommend that you install one Directory Server for use with all the Software AG products that require it.

■ The Adabas Administration Services installation is paired (grouped) with the installation of Adabas LUW. One Adabas Administration Services instance should be installed in each suite (root) where Adabas version 6.4 or later is installed, to allow administration of that Adabas instance by Adabas Manager.

If you are planning to use Adabas Manager to administer an existing version 6.3 of Adabas, install Adabas Administration Services in a root without Adabas version 6.4 installed. By default, if no Adabas is found in this suite, Adabas Administration Services configures itself during installation to administer the existing Adabas 6.3 version.

Adabas Administration Services requires the use of the Software AG Directory Server; so be sure to have already installed the Directory Server before attempting an Adabas Administration Services installation or install the Directory Server at the same time as Adabas Administration Services.

The **Infrastructure** entry in the Software AG Installer includes the installation of the System Management Hub (SMH). SMH should be installed on a machine in your network that can be accessed by all machines where the Software AG Directory Server will be installed. It should be installed on a dedicated system that is operational 24 hours a day, with a UPS.

You cannot ungroup installations that have been paired or grouped. However, you can select multiple installation configurations for installation at the same time. To configure your installation of these products and create effective production environments, work with your system administrators and Software AG Global Consulting Services.

## **System Requirements**

This section describes the system requirements of Adabas Administration Services.

- Supported Operating System Platforms
- Supported Hardware
- Supported Browsers
- Space Requirements
- Windows Requirements

#### Firewall Requirements

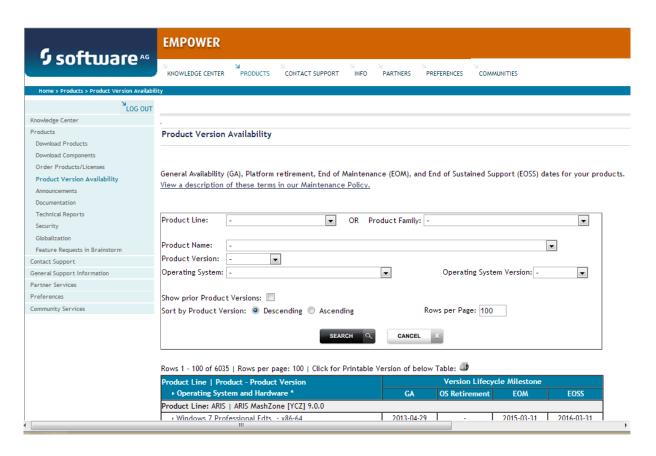
### **Supported Operating System Platforms**

Software AG generally provides support for the operating system platform versions supported by their respective manufacturers; when an operating system platform provider stops supporting a version of an operating system, Software AG will stop supporting that version.

For information regarding Software AG product compatibility with IBM platforms and any IBM requirements for Software AG products, please review the *Product Compatibility for IBM Platforms* web page.

Before attempting to install this product, ensure that your host operating system is at the minimum required level. For information on the operating system platform versions supported by Software AG products, complete the following steps.

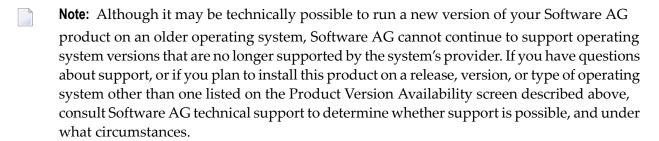
- 1. Access Software AG's Empower web site at https://empower.softwareag.com.
- Log into Empower. Once you have logged in, you can expand Products in the left menu of the web page and select Product Version Availability to access the Product Version Availability screen.



3. Use the fields on this top of this screen to filter its results for your Software AG product. When you click the **Search** button, the supported Software AG products that meet the filter criteria are listed in the table below the filter criteria.

This list provides, by supported operating system platform:

- the Software AG general availability (GA) date of the Software AG product;
- the date the operating system platform is scheduled for retirement (OS Retirement);
- the Software AG end-of-maintenance (EOM) date for the product; and
- the Software AG end-of-sustained-support (EOSS) date for the product.



### Supported Hardware

For general information regarding Software AG product compatibility with other platforms and their requirements for Software AG products, visit Software AG's *Hardware Supported* web page.

## **Supported Browsers**

The System Management Hub requires an Internet browser. For information on supported browsers, see the *webMethods System Requirements* documentation on the Empower web site.

## Space Requirements

The following table displays the minimum disk space requirements on Windows and UNIX systems for various Adabas LUW and Entire Net-Work LUW products, including the Software AG Directory Server:

Product	Space Requirement
Entire Net-Work Administration LUW	5 MB
Entire Net-Work Client	25 MB
Entire Net-Work Server	30 MB
Software AG Directory Server	20 MB

#### Windows Requirements

In Windows environments, be sure to install Microsoft Visual Studio 2008 Redistributable Package.

## Firewall Requirements

If you attempt to install and use this software in a system with a firewall in place, be sure that your system administrator has set up the firewall so that the component applications can access the ports they need (including the Software AG Directory Server port and any ports Entire Net-Work dynamically assigns during its own processing). For more information about port usage, read the *Port Number Reference* found elsewhere in this documentation.

## **Configuration Considerations**

This section describes configuration issues you should consider before you install Adabas Administration Services.

Adabas Administration Services requires the use of the Software AG Directory Server; so be sure to have already installed the Directory Server before attempting an Adabas Administration Services installation or install the Directory Server at the same time as Adabas Administration Services.

- How Many Adabas Administration Services Should You Install?
- Where Should You Install the Adabas Administration Services?

## How Many Adabas Administration Services Should You Install?

One Adabas Administration Services instance should be installed in each suite (root) where Adabas version 6.4 or later is installed, to allow administration of that Adabas instance by Adabas Manager.

If you are planning to use Adabas Manager to administer an existing version 6.3 of Adabas LUW, install Adabas Administration Services in a root without Adabas version 6.4 installed. By default, if no Adabas is found in this suite, Adabas Administration Services configures itself during installation to administer the existing Adabas 6.3 version.

#### Where Should You Install the Adabas Administration Services?

An Adabas Administration Services instance should be installed in the suite (root) where Adabas version 6.4 or later is installed.

## **Before You Begin**

Before you begin installing this product, ensure that the following prerequisites have been met:

- 1. Software AG strongly recommends that you create an installation image of your existing Software products and store the image on your internal network. You should create an image for each operating system on which you plan to run the installation (for example, 32-bit, 64-bit, or both). This will help you reduce WAN traffic and speed up installation and will ensure consistency across installations over time, since the Software AG Installer provides only the latest release of each product.
- 2. Close (stop) all open applications, especially those applications interacting with or depending on your Adabas databases. This includes Natural, Adabas Manager, the Adabas DBA Workbench, and prior releases of any other Adabas products. To be on the safe side, also shut down all Software AG services.



**Important:** For some Software AG products, the Software AG Uninstaller will not be able to remove key files that are locked by the operating system if the associated Software AG products are not shut down.

- 3. Disable any antivirus software.
- 4. Ensure the target computer is connected to the network.
- 5. If this product requires a license key file, verify the license key file is copied somewhere in your environment. Products requiring license key files will not run without valid license keys. For more information, read *The License Key*, elsewhere in this section.
- 6. Verify your environment supports the system requirements for this product, as described in *System Requirements*, elsewhere in this section.

## **Installation Steps**

Adabas Administration Services is installed using the Software AG Installer. This installation documentation provides a brief description on how to install the Adabas Administration Services directly on the target machine using the installer wizard. For detailed information on the installer wizard, read *Using the Software AG Installer*.



**Note:** Read *Using the Software AG Installer* also if you want to use console mode, or if you want to install using an installation script or installation image.

- To install Adabas Administration Services, complete the following steps:
- 1 Start the Software AG Installer as described in *Using the Software AG Installer*.

- When the first page of the Software AG Installer wizard (the Welcome panel) appears, choose the **Next** button repeatedly, specifying all required information on the displayed panels, until the panel containing the product selection tree appears.
  - All Adabas-related products (including Software AG Directory Server) can be selected for installation within the **Adabas Family** product selection tree.
  - In addition to the **Adabas Family** product selection tree, two other trees, **Event-Driven Architecture** and **Infrastructure** (which includes the System Management Hub installation) are available for installation. The **Infrastructure** tree must be selected for all Software AG products; it provides the necessary Java runtime environment for the Software AG Installer.
- 3 To install Adabas Administration Services, select (check) the Adabas Administration Services entry from the **Adabas Family** product selection tree.
  - **Note:** When you select Adabas Administration Services, Adabas Client is also selected unless an Adabas Client is already installed on the machine. You can opt to install other Software AG products from this list at the same time. This section just describes the installation of Adabas Administration Services.
- 4 On the License panel, read the license agreement and select the check box to agree to the terms of the license agreement and then click **Next** to continue. If you do not accept the license agreement, the installation will stop.
- When the **Configure** panel appears, specify the URL and port number for the Directory Server that should be used for this installation. The default is *tcpip://localhost:4952*. For complete information on the port used by the Directory Server, read *Port Number Reference*, elsewhere in this guide.
  - In addition, select the radio button indicating whether Adabas Administration Services should be installed as an application or a service. You can only select one. By default, it is installed as a service.
  - Click **Next** to continue.
- On the last panel, review the items you have selected for installation. If the list is correct, choose the **Next** button to start the installation process.

After Adabas Administration Services has been installed, it will start automatically if it has been started as a system service. You can start and stop it as you would any system service.

## **Configuring Product Components for Windows Personal Firewall**

If you have the default Microsoft Windows personal firewall enabled on a PC and you would like to install and run Adabas and Entire Net-Work components on that PC, you will need to allow communications through the firewall on certain ports. You can do this in one of two ways: you can allow ports for a specific executable program or you can open specific ports.

- Allow Ports for a Specific Executable Program
- Open a Specific Port



**Note:** If you attempt to install Adabas or Entire Net-Work in a system with a firewall in place, be sure that your system administrator has opened the firewall for the Software AG Directory Server port or the installation may not complete successfully.

### Allow Ports for a Specific Executable Program

You can allow a specific executable program to open a port. To do so, issue the following command:

```
C:\>netsh firewall add allowedprogram program="<path and file name>"
name="<component-name>" profile=ALL
```

where <path and file name is the path and file name of the file you want to allow and <component-name is a user-specified name to identify the file you are allowing. The following table lists the common Adabas and Entire Net-Work component files that might need to be allowed if Windows personal firewall is enabled:

Component Name	Path and File Name
Entire Net-Work Client Service	<pre><your-installation-location>\EntireNetWorkClient\bin\wclservice.exe</your-installation-location></pre>
Entire Net-Work Kernel program	<pre><your-installation-location>\EntireNetWorkServer\bin\wcpkernel.exe</your-installation-location></pre>
Entire Net-Work Server Service	<pre><your-installation-location>\EntireNetWorkServer\bin\wcpservice.exe</your-installation-location></pre>
Software AG Directory Server Service	$<\!$
System Management Hub (SMH) CSLayer Service	<pre><your-installation-location>\InstanceManager\bin\argsrv.exe</your-installation-location></pre>
System Management Hub	<pre><your-installation-location>\InstanceManager\bin\argevsrv.exe</your-installation-location></pre>

Component Name	Path and File Name	
(SMH) EventLayer Service		
( )		

To remove the Adabas or Entire Net-Work component as an allowed program, issue the following command:

```
C:\>netsh firewall delete allowedprogram program="<path and file name>"
profile=ALL
```

where *<path* and *file* name is the path and file name of the file you want to disallow.

## **Open a Specific Port**

To open a specific port for use by an Adabas or Entire Net-Work component in the firewall, issue the following command:

```
C:\>netsh firewall add portopening protocol=TCP port=nnnn
name="<component-name>" profile=ALL
```

where *nnnn* is the port number you want to open and *<component-name>* is a user-specified name to identify the port you are allowing.

To avoid port number conflicts, read *Port Number Reference*, later in this guide, for a general list of the ports used by Software AG products.

To close a specific port in the firewall, issue the following command:

```
C:\>netsh firewall delete portopening protocol=TCP port=nnnn profile=ALL
```

where *nnnn* is the port number you want to close.

## **Uninstallation Steps**

You uninstall this product using the Software AG Uninstaller. For information on how to use the uninstaller, read the *Using the Software AG Installer* guide.

# 4 About the System Management Hub

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The System Management Hub (SMH) is a Web-based graphical user interface (GUI) you can use to perform administrative tasks for some Software AG products, including Software AG Directory Server, Adabas Administration Services, and Entire Net-Work. It runs in a standard Web browser.

Before you start using the System Management Hub, you must set up an administrative user for the product. To do so, consult the *Add Administrator* section of the System Management Hub documentation, available on Empower.

This chapter provides a high-level overview of the System Management Hub.

## **Accessing the System Management Hub**

#### > To access the System Management Hub:

1 Type the following URL into your Web browser:

```
http://smh-mil-node:smh-mil-http-port/smh/login.htm
```

where *smh-mil-node* is the name of the machine where the System Management Hub (SMH) is running (normally this is "localhost") and *smh-mil-http-port* is the port number (the default is 49981) for the SMH MIL (Management Independent Layer) server.



**Note:** If SMH has been installed on an Apache Web server, replace <code>smh-mil-http-port</code> with the port number of the Apache Web server (the default is 80) rather than the SMH MIL server.

Or:

Select **System Management Hub** on the **Software AG Base Technology** Start Programs submenu (Windows only) and then select **Web Interface** on the resulting submenu.

The login screen for the System Management Hub (SMH) appears.

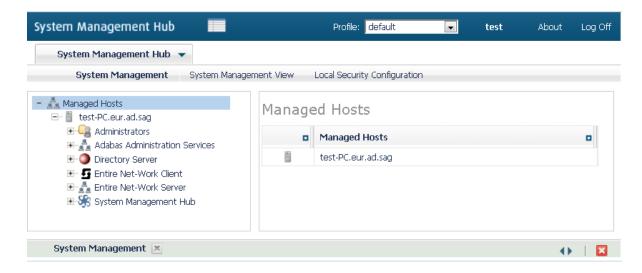
2 Login to the System Management Hub, as described in the section entitled *Internal HTTP Server* under System Management Hub Web Interface in System Management Hub Interfaces and Tools.

The System Management Hub main panel appears on the **System Management** tab.



## **Leaving the System Management Hub**

- > To leave the System Management Hub:
- Click the Log Off command at the top of the screen.



Or:

Close the Browser window.

The System Management Hub window is closed.

## Using the Refresh Button in the System Management Hub

**Refresh** buttons appear in the command frame of the System Management Hub for many panels. Use the **Refresh** button to update the values of items listed in the detail-view frame.

## **Getting Help**

- > To get help on an detail-view frame:
- If it is available, click the **Help** button in the detail-view frame of the System Management Hub screen.

The documentation pertaining to that System Management Hub view appears.

For complete information about the System Management Hub, read its documentation, available on Empower.

# Performing Adabas Administration Services Administration

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This chapter describes the administration tasks you can perform for Adabas Administration Services using SMH. It is organized as follows:

Starting and Stopping Adabas Administration Services	Describes how to start and stop Adabas Administration Services.
The Adabas Administration Services SMH Administration Area	Describes how to access the Adabas Administration Services SMH administration area, how to get online help for it, and how to refresh the data that appears in the area.
Listing, Selecting, and Reviewing Installed Services	Describes how to list, review, and select services.
Reviewing the Access Status of a Service	Describes how to review the access status of a service.
Reviewing Service Statistics	Describes how to review the statistics for a service.
Dynamically Collecting Detailed Statistics	Describes how to activate the collection of detailed service statistics.
Generating a Service Configuration Dump	Describes how to generate a service configuration dump in the log file.
Setting Service Parameters Offline	Describes how you can set service parameters offline.
Reviewing the Service Parameter Summary	Describes how to review a summary of parameter settings for a service.
Setting Basic Service Parameters	Describes how to set basic service parameters.
Setting Advanced Service Parameters	Describes how to set advanced service parameters.
Specifying Adabas Administration Services Scalability	Describes how to set Adabas Administration Services scalability settings, as a way of improving the performance of your system.
Maintaining Adabas Administration Services Filters	Describes how to apply filters to the databases, Kernels, clients, and client hosts that can interact with Adabas Administration Services.
Changing the Software AG Directory Server	Describes how to change the Software AG Directory Server used by the service.
Reviewing Service Status	Describes how to review the status of a service.
Checking Service Databases	Describes how to check the status of the databases managed by Adabas Administration Services.
Pinging Databases	Describes how to pink a database managed by Adabas Administration Services.
Dynamically Managing Direct Clients and Adabas Contexts	Describes how to dynamically manage direct clients and Adabas contexts of a service.
Dynamically Managing Service Client Hosts	Describes how to dynamically connect and disconnect to host machines of a service.
Shutting Down a Service	Describes how to shut down a service.
Managing Adabas Administration Services Log Files	Describes how to view and manage Adabas Administration Services log files.

Tracing Adabas Administration Services Processing

Describes the different ways you can trace Adabas Administration Services processing. Tracing should be used only for problem analysis and, preferably, with the assistance of a Software AG technical support representative.

## **Starting and Stopping Adabas Administration Services**

This section describes what you need to do to start and stop Adabas Administration Services.

- Starting Adabas Administration Services
- Stopping Adabas Administration Services

During installation of Adabas Administration Services, the Adabas Administration Services service or daemon is started automatically when the computer is started.



### **Starting Adabas Administration Services**

If, for some reason, the Adabas Administration Services service or daemon is manually stopped, you will need to manually start it before Adabas Administration Services can function correctly.

#### > To manually start the Adabas Administration Services service on Windows systems:

■ Start it from the Windows Services window (usually located under Administrative Tools on the Control Panel). For more information on the Windows Services window, refer to the documentation for your Windows system.

The Adabas Administration Services service is started.

## **Stopping Adabas Administration Services**

You can shut down (stop) the Adabas Administration Services Windows service using SMH or using the Windows Services window. You can shut down (stop) the Adabas Administration Services UNIX daemon using SMH or using a shell script. This section describes all methods.

#### To stop the Adabas Administration Services Windows service from the Windows Services window:

■ Stop it from the Windows Services window (usually located under Administrative Tools on the Control Panel). For more information on the Services window, refer to the documentation for your Windows system.

The Adabas Administration Services service is stopped.

## To stop the Adabas Administration Services Windows service or daemon from the System Management Hub (SMH):

■ Read *Shutting Down a Service*, elsewhere in this guide for complete information.

## The Adabas Administration Services SMH Administration Area

This section describes how to access the Adabas Administration Services SMH administration area, how to get online help for it, and how to refresh the data that appears in the area.

- Accessing the Adabas Administration Services SMH Administration Area
- Getting Help
- Refreshing the Displays

### Accessing the Adabas Administration Services SMH Administration Area

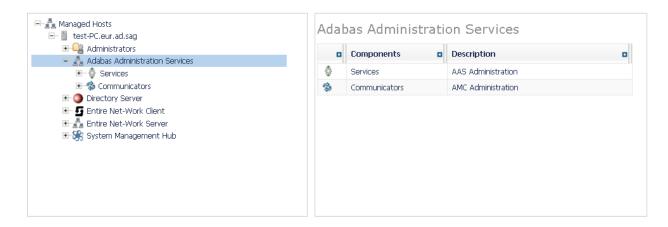
To access the Adabas Administration Services administration area of the System Management Hub (SMH):

Make sure you have started and logged into the System Management Hub.

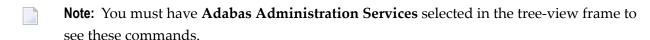
- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.

The Adabas Administration Services administration area of the System Management Hub becomes available to you.

The Adabas Administration Services administration area lists the services and communicators you can manage.



The following commands are available in the command menu for the Adabas Administration Services administration area or by right-clicking on **Adabas Administration Services** in tree-view:



Command	Use this command to:
Add to Browser Favorites	Add a node in tree-view to your browser favorites.
Add to View	Add a node in tree-view to System Management View. For more information about System Management View, read your System Management Hub documentation.
Help	Link to help for your use of SMH as it pertains to the Adabas Administration Services administration area.
Refresh	Refresh the screen.
Remove from View	Remove a node in tree-view from System Management View. For more information about System Management View, read your System Management Hub documentation.

The remainder of this section describes administrative tasks for services. For information on administrative tasks for communicators, refer to your Adabas Manager Communication Client documentation.

#### **Getting Help**

- To get help on an Adabas Administration Services management task or SMH panel:
- 1 Access the Adabas Administration Services SMH administration area, as described in *Accessing the Adabas Administration Services SMH Administration Area*, elsewhere in this section.
- 2 Right-click **Adabas Administration Services** in tree-view and select the **Help** option from the resulting drop-down menu.

Or:

Navigate to any panel within the Adabas Administration Services SMH administration area and click the **Help** button on the panel.

Help for the panel or Adabas Administration Services SMH administration area appears.

### **Refreshing the Displays**

- > To refresh the displays in the Adabas Administration Services SMH administration area:
- Access the Adabas Administration Services SMH administration area, as described in *Accessing the Adabas Administration Services SMH Administration Area*, elsewhere in this section.
- 2 Right-click Adabas Administration Services or other Adabas Administration Services SMH administration item in tree-view and select the Refresh option from the resulting drop-down menu.

The data for the Adabas Administration Services SMH administration area is refreshed.

## Listing, Selecting, and Reviewing Installed Services

#### To list and review the services managed by SMH:

Make sure you have accessed the System Management Hub.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.



The following commands are available:

**Note**: You must right-click on **Services** in the tree-view frame to see these commands.

Command	Use this command to:
Add to Browser Favorites	Add a node in tree-view to your browser favorites.
Add to View	Add a node in tree-view to System Management View. For more information about System Management View, read your System Management Hub documentation.
Help	Link to help for your use of SMH as it pertains to the Adabas Administration Services administration area.
Refresh	Refresh the screen.
Remove from View	Remove a node in tree-view from System Management View. For more information about System Management View, read your System Management Hub documentation.

5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.

The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.



The following commands are available for each service:

**Note**: You must right-click on a specific service in the tree-view frame to see these commands.

Command	Use this command to:
Access Status	Review the access status of the selected service. For more information, read <i>Reviewing the Access Status of a Service</i> , elsewhere in this section
Add to Browser Favorites	Add a node in tree-view to your browser favorites.
Add to View	Add a node in tree-view to System Management View. For more information about System Management View, read your System Management Hub documentation.
Dump configuration	Generate a service configuration dump in the log file. For more information, read <i>Generating a Service Configuration Dump</i> , elsewhere in this section.
Help	Link to help for your use of the System Management Hub (SMH) as it pertains to the Adabas Administration Services administration area.
New Log File	Close the current Adabas Administration Services log file and start a new one. For more information, read <i>Managing Adabas Administration Services Log Files</i> , elsewhere in this section.
Refresh	Refresh the screen.
Remove from View	Remove a node in tree-view from System Management View. For more information about System Management View, read your System Management Hub documentation.
Set Detailed Statistics Online	Indicate whether detailed statistics should be collected. For more information, read <i>Dynamically Collecting Detailed Statistics</i> , elsewhere in this section.
Shutdown	Shut down the service. For more information, read <i>Shutting Down a Service</i> , elsewhere in this section.
Set Trace Level Online	Set the Adabas Administration Services trace level. For more information, read <i>Dynamically Setting the Trace Level</i> , elsewhere in this section.
Statistics	View statistics about the service. For more information, read <i>Reviewing Service Statistics</i> , elsewhere in this section.
View Log File	View the current Adabas Administration Services log file. For more information, read <i>Managing Adabas Administration Services Log Files</i> , elsewhere in this section.

## Reviewing the Access Status of a Service

#### To review the access status of a service:

Make sure you have accessed the System Management Hub.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- Right-click on the name of the service whose access status you want to review and select the **Access Status** command from the drop-down menu.

The access status for the selected service is displayed in the detail-view frame:



### **Reviewing Service Statistics**

#### > To review the statistics for a service:

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 In tree-view, right-click on the name of the service for which you want to review statistics, and select **Statistics**.
  - Statistics for the service appears in detail-view. For example:

Statistics for Service TEST-PC_1	<b>0</b> 0	ount 🗖
Nodes	C	
Connections	C	
Clients	C	
Relay Clients	C	
Databases	1	
Adabas Contexts	C	
Adabas Calls	0	
RDA Messages	0	
Ebz Messages	0	
Total Requests	0	
Total Replies	C	
Bytes Received	0	
Bytes Sent	C	
Relayed Messages	C	
Admin Messages	C	
Errors	0	

## **Dynamically Collecting Detailed Statistics**

Collecting detailed statistics for a service can provide useful data in resolving problems. However, we do not recommend that you collect detailed statistics all the time as the performance of your system may be affected by their collection.

#### > To dynamically turn on the collection of detailed statistics for a service:

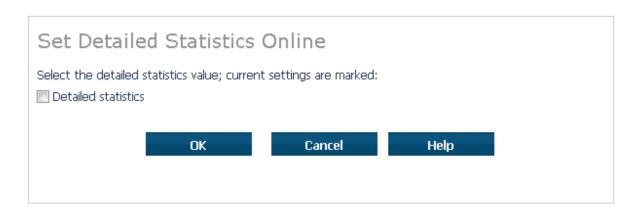
Make sure you have accessed the System Management Hub.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.

The Adabas Administration Services administration area of the System Management Hub becomes available to you.

- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- In tree-view, right-click on the name of the service for which you want to set detailed statistics, and select **Set Detailed Statistics On Line**.

The **Set Detailed Statistics Online** panel appears in detail-view. For example:



7 Click **OK** to turn on the collection of detailed statistics.

Detailed statistic collection for the service is started.

### Generating a Service Configuration Dump

You can request that a service configuration dump be written to the log file. This dump information includes the servers, database IDs, connections, clients, host machines, and Adabas contexts associated with the service.

#### > To generate a service configuration dump in the log file:

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.

3 Select **Adabas Administration Services** in the tree-view under the managed host.

The Adabas Administration Services administration area of the System Management Hub becomes available to you.

4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.

The list of installed services appears.

5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.

The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.

In tree-view, right-click on the name of the service for which you want to generate a configuration dump, and select **Dump configuration**.

The **Dump Configuration** panel appears in detail-view. For example:



7 Click**OK** to dump the service configuration.

The dump is generated

# **Setting Service Parameters Offline**

You can set service parameters offline using the **Set Parameters Offline** node in tree-view.

#### > To set service parameters offline:

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.

3 Select **Adabas Administration Services** in the tree-view under the managed host.

The Adabas Administration Services administration area of the System Management Hub becomes available to you.

4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.

The list of installed services appears.

5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.

The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.

Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label and then select the **Set Parameters Offline** node in tree-view.

The following commands are available for each service:



**Note**: You must right-click on **Set Parameters Offline** in the tree-view frame to see these commands.

Command	Use this command to:
Add Service Access	This command is not currently functional.
Add to Browser Favorites	Add a node in tree-view to your browser favorites.
Add to View	Add a node in tree-view to System Management View. For more information about System Management View, read your System Management Hub documentation.
Help	Link to help for your use of the System Management Hub (SMH) as it pertains to the Adabas Administration Services administration area.
Parameters Summary	Review a summary of parameter settings for the selected service. For more information, read <i>Reviewing the Service Parameter Summary</i> , elsewhere in this section.
Refresh	Refresh the screen.
Remove from View	Remove a node in tree-view from System Management View. For more information about System Management View, read your System Management Hub documentation.
Service Filters	Apply a filter to the databases, Kernels, clients, and client hosts that can interact with this service. For more information, read <i>Maintaining Adabas Administration Services Filters</i> , elsewhere in this section
Set Advanced Parameters	Set advanced parameters for the service. For more information, read <i>Setting Advanced Service Parameters</i> , elsewhere in this section.
Set Basic Parameters	Set basic parameters for the service. For more information, read <i>Setting Basic Service Parameters</i> , elsewhere in this section.

Command	Use this command to:
Set Directory Server	Change the Software AG Directory Server used by the service. For more information, read <i>Changing the Software AG Directory Server</i> , elsewhere in this section
Set Service Scalability	Set Adabas Administration Services scalability settings, as a way of improving the performance of your system. For more information, read <i>Specifying Adabas Administration Services Scalability</i> , elsewhere in this section.
Set Service Trace Granularity	Set the Adabas Administration Services trace level. For more information, read <i>Permanently Setting the Trace Level</i> , elsewhere in this section.
Shutdown	Shut down the service. For more information, read <i>Shutting Down a Service</i> , elsewhere in this section.
Status	Review the status of a service. For more information, read <i>Reviewing Service Status</i> , elsewhere in this section.

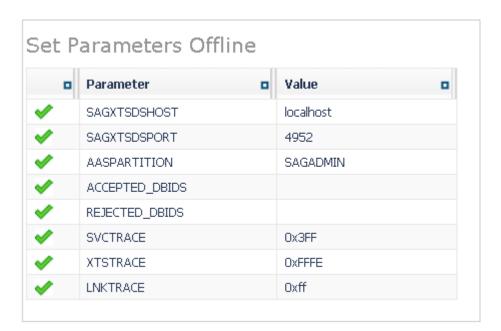
# **Reviewing the Service Parameter Summary**

### > To review a summary of parameter settings for a service:

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select Adabas Administration Services in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label and then select the **Set Parameters Offline** node in tree-view.

7 In tree-view, right-click on **Set Parameters Offline** and select the **Parameters Summary** command from the resulting drop-down menu.

A summary of the service definition parameters appears in detail-view.



## **Setting Basic Service Parameters**

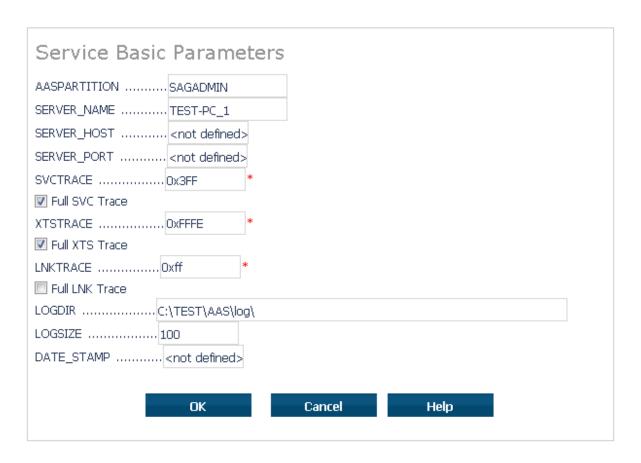
#### > To set basic Adabas Administration Services definition parameters:

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.

The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.

- Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label and then select the **Set Parameters Offline** node in tree-view.
- In tree-view, right-click on **Set Parameters Offline** and select the **Set Basic Parameters** command from the resulting drop-down menu.

The **Service Basic Parameters** panel appears in detail-view.



Modify the parameters on the **Service Basic Parameters** panel, as described in the following table. When all parameters are set as you want, click **OK** to save them.

Parameter	Description
AASPARTITION	Specify the partition in which the service is assigned, if any. For more information,
	read <i>Understanding Partitioning</i> , elsewhere in this guide.

Parameter	Description
SERVER_NAME	Optionally, specify the name for this service definition. Service names are required for connections between mainframe and open systems nodes, but if you do not specify one for the service in this parameter, Adabas Administration Services will generate one for you. In fact, whenever a new service is defined, a random name is automatically generated for it.
	<b>Note:</b> Service names must be unique across the system. If two services have the
	same name, network connections obtained through those services may not be handled accurately. We therefore recommend that you keep a list of your service names and ensure that any generated (or manually specified) names are unique.
	Adabas Administration Services generates a random name for a new service. However, there is a small risk that a duplicate name might be generated with a service that is not started. You will want to check any generated service names against your service name list to ensure the generated name is unique.
SERVER_HOST	Optionally, specify the server host name for this service.
SERVER_PORT	Optionally, specify the server port number for this service.
SVCTRACE	Set the hexadecimal service trace level using this parameter. Valid values are any of the following hexadecimal values:
	■ 0×1 - produce trace snapshot on any error code
	■ 0x2 - trace error paths only
	■ 0×4 - trace flow control only
	■ 0x8 - produce full dumps of all activity
	■ 0×10 - trace SMH-related activity
	■ 0×100 - trace ADALNKX (Adabas calls)
	■ 0x200 - trace XTS (Software AG transport services)
	Do not specify full tracing unless specifically instructed to do so by a Software AG technical support representative. If you do, your installation could be overrun with trace messages that would be meaningless to you and would likely affect system performance.
	For more information about service tracing, read <i>Tracing Adabas Administration Services Processing</i> , elsewhere in this guide.
Full SVC Trace	Click in this checkbox to set the SVCTRACE value to obtain full tracing of this service's processing. Do not check this checkbox unless specifically instructed to do so by a Software AG technical support representative. If you do, your installation could be overrun with trace messages that would be meaningless to you and would likely affect system performance.
XTSTRACE	Set the hexadecimal XTS trace level using this parameter. This is the trace level for Software AG transport services. Valid values are any of the following hexadecimal values:
	■ 0×1 - buffer the log messages

Parameter	Description
	■ 0x2 - connect calls trace
	■ 0×4 - listen calls trace
	■ 0x8 - send calls trace
	■ 0×10 - receive calls trace
	■ 0x20 - dump send/receive buffers
	■ 0x40 - directory service trace
	■ 0x80 - miscellaneous code
	■ 0×100 - internal interface trace
	■ 0x200 - TCP driver trace
	■ 0×400 - SMP trace
	■ 0x800 - Directory Server trace
	■ 0×1000 - trace statistics
	Do not specify full tracing unless specifically instructed to do so by a Software AG technical support representative. If you do, your installation could be overrun with trace messages that would be meaningless to you and would likely affect system performance.
	For more information about service tracing, read <i>Tracing Adabas Administration Services Processing</i> , elsewhere in this guide.
Full XTS Trace	Click in this checkbox to set the XTSTRACE value to obtain full tracing of Software AG transport services processing. Do not check this checkbox unless specifically instructed to do so by a Software AG technical support representative. If you do, your installation could be overrun with trace messages that would be meaningless to you and would likely affect system performance.
LNKTRACE	Set the hexadecimal ADALNK trace level using this parameter. This is the trace level for Adabas calls. Valid values are the hexadecimal values "00" (no tracing) or "0x1F" (full tracing). At this time, there is no granularity to ADALNK trace levels. Do not specify full tracing unless specifically instructed to do so by a Software AG technical support representative. If you do, your installation could be overrun with trace messages that would be meaningless to you and would likely affect system performance.
	For more information about service tracing, read <i>Tracing Adabas Administration Services Processing</i> , elsewhere in this guide.
Full LNK Trace	Click in this checkbox to set the LNKTRACE value to obtain full tracing of ADALNK processing. Do not check this checkbox unless specifically instructed to do so by a Software AG technical support representative. If you do, your installation could be overrun with trace messages that would be meaningless to you and would likely affect system performance.
LOGDIR	Specify the fully-qualified path of the directory where service log files should be written. For more information, read <i>Specifying the Adabas Administration Services Log File Location</i> , elsewhere in this section.

Parameter	Description
LOGSIZE	Specify the number of megabytes (MB) to which a service log file can grow before it is automatically closed and a new log file is started. The default is 500 MB. For more information about service log files, read <i>Managing Adabas Administration Services Log Files</i> , elsewhere in this guide.
DATE_STAMP	Indicate whether or not you want the date and time stamp to be added to every Adabas Administration Services trace statement written. Valid values are "YES" (include the date and time stamp) or "NO" (do not include the date and time stamp). The default is "NO".

The Adabas Administration Services basic parameters are updated in the appropriate service definition file. You must restart Adabas Administration Services in order for these parameter changes to take effect.

## **Setting Advanced Service Parameters**

#### ➤ To set advanced Adabas Administration Services definition parameters:

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label and then select the **Set Parameters Offline** node in tree-view.
- In tree-view, right-click on **Set Parameters Offline** and select the **Set Advanced Parameters** command from the resulting drop-down menu.
  - The **Service Advanced Parameters** panel appears in detail-view.

Service Advanced Parameters
ADABAS_TIMEOUT60
TIMER_TIMEOUT6
STATISTICS_DETAILSNO
STATISTICS_INTERVAL60
PING_DB_INTERVAL
CHECK_DBS_INTERVAL600
SERVICE_THREADS <anot defined=""></anot>
CHECK_CXT_INTERVAL< <not defined=""></not>
Protocol Family
Unspecified
IPV4 Only     IPV6 Only
Tr vo Orlly
OK Cancel Help
ok Galicei neib

Modify the parameters on the **Service Advanced Parameters** panel, as described in the following table. When all parameters are set as you want, click **OK** to save them.

Parameter	Description
ADABAS_TIMEOUT	Specify the number of seconds the service should wait for a response from either a local or remote Adabas call before it times out. The default is 60 seconds; the minimum value you can specify is 5 seconds.
TIMER_TIMEOUT	Specify the frequency (in seconds) at which the service should check to see if it needs to run the STATISTICS_INTERVAL, PING_DB_INTERVAL, or CHECK_DBS_INTERVAL processing. The default is 6 seconds.
STATISTICS_DETAILS	Indicate whether detail statistics should be collected and displayed for clients and client hosts. Valid values for this parameter are "YES" and "NO"; the default is "NO". Note that there is the performance of your system could be affected when statistic details are collected.
STATISTICS_INTERVAL	Specify the frequency at which statistics are collected for the service, in minutes. The default is 60 minutes.
PING_DB_INTERVAL	Specify the frequency at which remote databases should be pinged to determine their status, in minutes. The default is zero (0) minutes (no pinging).
CHECK_DBS_INTERVAL	Specify the frequency at which local databases should be pinged to determine their status, in seconds. The default is 20 seconds.

Parameter	Description
SERVICE_THREADS	Specify the number of threads available for a network node. When this limit is exceeded, service requests will wait until a thread becomes available. Use this parameter to tune how your network processes requests. The default (and minimum) is 5 threads; the maximum is 1024 threads.
CHECK_CXT_INTERVAL	Specify how old the Adabas contexts that are created by Adabas Administration Services clients can be, in seconds. Valid values are zero (0) or an integer between 60 and 43,200 seconds (30 days).
	Anytime a client connects with Adabas Administration Services, a context (a memory table with client information) for that specific client is created. When a client disconnects, the context is deleted. In situations when clients are disconnected abnormally (for example, they crash) or they are not disconnected for a long time (for example, when navigating on a web page), the size of Adabas Administration Services unused memory increases significantly, which can affect Adabas Administration Services performance. To avoid such situations, you can use this parameter to indicate how long contexts should be allowed to remain.
	If CHECK_CXT_INTERVAL is not zero, an Adabas Administration Services thread periodically (every minute) checks the Adabas contexts created by clients connected to Adabas Administration Services. Contexts older than the time set by this parameter are deleted.
Protocol Family	Select the TCP/IP protocol family used for the service. Click (check) Unspecified, IPV4 Only, or IPV6 Only. If you select IPV4 Only or IPV6 Only, only the selected protocol is used for communications with this service. If you select Unspecified, the domain name server (DNS) will determine which protocol is used; Unspecified is the default.
	<b>Caution:</b> We recommend that you use the default value ( <b>Unspecified</b> ) for this parameter, allowing the DNS to determine which communication protocol is appropriate. If you do specify a specific protocol, calls to Adabas Administration Services via the other protocol type are ignored.

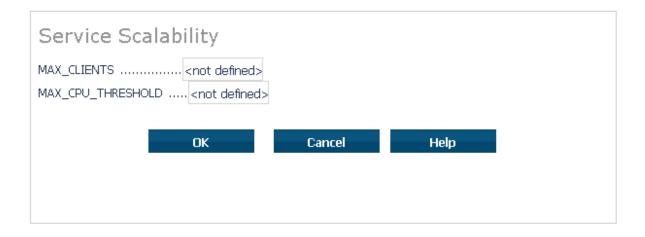
The Adabas Administration Services advanced parameters are updated in the appropriate service definition file. You must restart Adabas Administration Services in order for these parameter changes to take effect.

## **Specifying Adabas Administration Services Scalability**

Use Adabas Administration Services scalability settings to adjust the amount in which the service is used as a way of improving the performance of your system.

### > To specify Adabas Administration Services scalability settings:

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label and then select the **Set Parameters Offline** node in tree-view.
- 7 In tree-view, right-click on **Set Parameters Offline** and select the **Set Service Scalability** command from the resulting drop-down menu.
  - The **Service Scalability** panel appears in detail-view.



Modify the parameters on the **Service Scalability** panel, as described in the following table. When all parameters are set as you want, click **OK** to save them.

Parameter	Description
MAX_CLIENTS	Specify the maximum number of client requests that can be processed concurrently by this service. When this limit is exceeded, client requests are rejected. The minimum value you can specify is "5"; the maximum value you can specify is "65535" or the number of clients allowed by your product license, whichever is lower.
MAX_CPU_THRESHOLD	Specify the maximum CPU usage (the threshold) for this service that can be used by clients of this service. When this CPU usage is exceeded, new clients are not accepted by the service. Valid CPU usage thresholds are expressed as percentages. The minimum value you can specify is "10"; the maximum value you can specify is "99".

The Adabas Administration Services scalability settings are updated in the appropriate service definition file. You must restart Adabas Administration Services in order for these settings to take effect.

## **Maintaining Adabas Administration Services Filters**

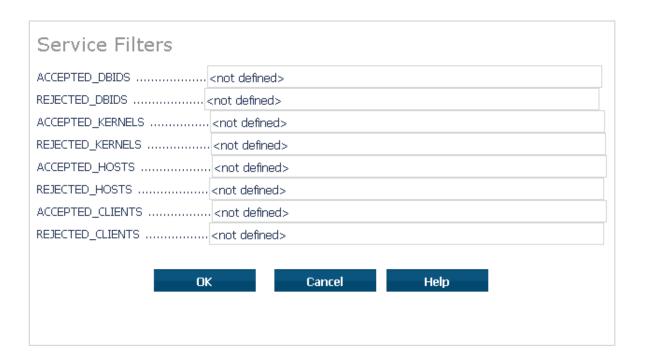
#### > To maintain the Adabas Administration Services filter list:

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.

The Adabas Administration Services administration area of the System Management Hub becomes available to you.

- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label and then select the **Set Parameters Offline** node in tree-view.
- 7 In tree-view, right-click on **Set Parameters Offline** and select the **Service Filters** command from the resulting drop-down menu.

The **Service Filters** panel appears in detail-view.



8 Modify the parameters on the **Service Filters** panel, as described in the following table. When all parameters are set as you want, click **OK** to save them.

Parameter	Description	
ACCEPTED_DBIDS	Specify the database IDs for which requests should be processed by this service. If more than one database ID is needed, separate them with commas. If a range of database numbers is needed, separate them with a dash. For example, "4,12-15,62" indicates that the service should process requests to databases 4, 62, and any databases with numbers between 12 and 15 (inclusive). For more information, read <i>Understanding Filtering</i> , elsewhere in this guide.  If no databases are listed in the <b>ACCEPTED_DBIDS</b> field, the service will process all requests to all databases defined in the Software AG Directory Server, except those listed in the <b>REJECTED_DBIDS</b> field.	
REJECTED_DBIDS	Specify the database IDs for which requests should <i>not</i> be processed by this service. If more than one database ID is needed, separate them with commas. If a range of database numbers is needed, separate them with a dash. For example, "4,12-15,62" indicates that the service should <i>not</i> process requests to databases 4, 62, and any databases with numbers between 12 and 15 (inclusive). For more information, read <i>Understanding Filtering</i> , elsewhere in this guide.	
	If no databases are listed in the <b>REJECTED_DBIDS</b> field, the service will process all requests to all databases defined in the Software AG Directory Server, unless a specific list is provided in the <b>ACCEPTED_DBIDS</b> field.	
ACCEPTED_KERNELS	Specify the Kernel names for which requests should be processed by this service. If more than one Kernel name is needed, separate them with comma For more information, read <i>Understanding Filtering</i> , elsewhere in this guidents.	
REJECTED_KERNELS	Specify the Kernel names for which requests should <i>not</i> be processed by this service. If more than one Kernel name is needed, separate them with commas For more information, read <i>Understanding Filtering</i> , elsewhere in this guide	
ACCEPTED_HOSTS	Specify the host machine names from and to which requests should be processed by this service. If more than host machine name is needed, separate them with commas. For more information, read <i>Understanding Filtering</i> , elsewhere in this guide.	
REJECTED_HOSTS	Specify the host machine names from and to which requests should <i>not</i> be processed by this service. If more than host machine name is needed, separate them with commas. For more information, read <i>Understanding Filtering</i> , elsewhere in this guide.	
ACCEPTED CLIENTS	Specify the client names from which requests should be processed by this service. If more than client name is needed, separate them with commas. For more information, read <i>Understanding Filtering</i> , elsewhere in this guide.	
REJECTED CLIENTS	Specify the client names from which service requests should <i>not</i> be processed by this service. If more than client name is needed, separate them with commas. For more information, read <i>Understanding Filtering</i> , elsewhere this guide.	

The Adabas Administration Services filters are updated in the appropriate service definition file. You must restartAdabas Administration Services in order for these filter changes to take effect.

## **Changing the Software AG Directory Server**

While you can specify that different Directory Servers be used by Adabas Administration Services, this is not recommended. The ability to do this is useful for testing only, but when your network testing is complete, we recommend that the same Directory Server be used for all Software AG products.

### > To change the Directory Server for Adabas Administration Services:

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label and then select the **Set Parameters Offline** node in tree-view.
- In tree-view, right-click on **Set Parameters Offline** and select the **Set Directory Server** command from the resulting drop-down menu.
  - The **Directory Server Parameters** panel appears in detail-view.



8 Fill in the fields on this panel, as described in the following table:

Field	Description	Required?
SAGXTSDSHOST	The host name on which the Directory Server is installed.	Yes
1	The port number assigned the Directory Server. The default is 4952. If this field is set to zero (0) or left blank, the default will be used.	No

#### 9 Click **OK**.

The Directory Server is changed for Adabas Administration Services. You must restart Adabas Administration Services in order for this change to take effect.

## **Reviewing Service Status**

You can review the status of a service.

#### > To review the status of a service:

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.

- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label and then select the **Set Parameters Offline** node in tree-view.
- 7 In tree-view, right-click on **Set Parameters Offline** and select the **Status** command from the resulting drop-down menu.

The status of the service appears in detail-view.

# **Checking Service Databases**

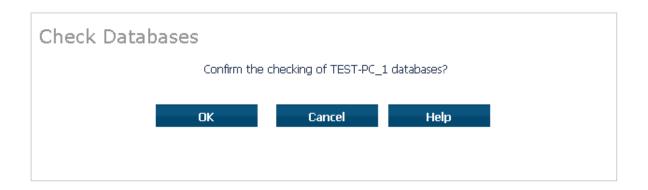
You can check the databases managed by a service. Checking the databases causes Adabas Administration Services to search for any Adabas databases that were started recently and to refresh its internal table and corresponding SMH information. This is useful, for example, when you want to obtain the latest status of the databases that a specific service manages.

### To check the databases managed by a service:

Make sure you have accessed the System Management Hub and that the service is started. For complete information about starting services, read *Starting Adabas Administration Services*, elsewhere in this guide.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.

- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label.
- 7 Right-click on **Databases** in tree-view and select **Check Databases** from the resulting drop-down menu.
  - A Check Databases panel appears in detail-view.



8 Click **OK** to check the service databases.

The databases are checked and the list and status of the databases is refreshed.

# **Pinging Databases**

#### To ping a database managed by Adabas Administration Services:

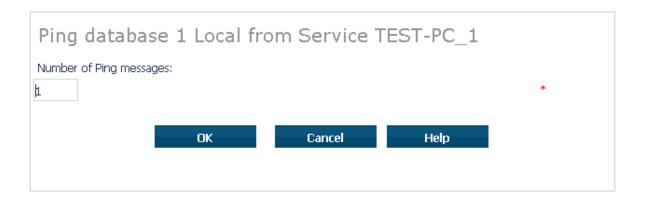
Make sure you have accessed the System Management Hub and that the service is started. For complete information about starting services, read *Starting Adabas Administration Services*, elsewhere in this guide.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.

The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.

- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label.
- 7 Expand **Databases** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases managed by the service are listed in tree-view.
- 8 Right-click on the database you want to ping and select **Ping** from the resulting drop-down menu.

A Ping panel appears in detail-view.



- 9 Specify the number of ping messages that should be sent from the service to the database in the **Number of Ping messages** box.
- 10 Click **OK** to start pinging.

The results of the ping attempts appears in detail-view, indicating whether or not the database is active.

# **Dynamically Managing Direct Clients and Adabas Contexts**

Direct clients are clients that process Adabas calls on the current service. Using Adabas Administration Services you can dynamically manage the direct clients of a service. You can also view statistical information about clients and contexts.

Adabas contexts are memory tokens that associate clients and Adabas databases and are used for Adabas session identification and statistics purposes.

This section covers the following topics:

- Listing Direct Clients and Adabas Contexts
- Viewing Direct Client and Adabas Context Statistics
- Dynamically Disconnecting Direct Clients
- Dynamically Deleting Adabas Contexts

### **Listing Direct Clients and Adabas Contexts**

#### To dynamically list the clients and Adabas contexts of a service:

Make sure you have accessed the System Management Hub and that the service is started. For complete information about starting service, read *Starting Adabas Administration Services*, elsewhere in this guide.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label.
- 7 Expand **Clients** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The client and Adabas context definitions for the service are listed in categories in tree-view. Two categories are listed: **Direct Clients** and **Adabas Contexts**.
- 8 Expand the appropriate category (**Direct Clients** or **Adabas Contexts**) in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The client or Adabas context definitions for the category you selected are listed in tree-view.

### **Viewing Direct Client and Adabas Context Statistics**

To activate this feature, set the STATISTICS\_DETAILS parameter to "YES" on the Service Advanced Parameters screen.

#### > To dynamically view statistics for a direct client or Adabas context:

Make sure you have accessed the System Management Hub and that the service is started. For complete information about starting services, read *Starting Adabas Administration Services*, elsewhere in this guide.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label.
- Expand **Clients** in tree-view, by clicking on the plus sign (+) to the left of its label.

The client and Adabas context definitions for the service are listed in categories in tree-view. Two categories are listed: **Direct Clients** and **Adabas Contexts**.

- Direct Clients: Direct clients are clients directly connected to this service. These clients are included in Adabas Administration Services counts for currently active clients.
- Adabas Contexts: Adabas contexts are memory tokens that associate clients and Adabas databases and are used for Adabas session identification and statistics purposes.
- 8 Expand the appropriate category (**Direct Clients** or **Adabas Contexts**) in tree-view, by clicking on the plus sign (+) to the left of its label.

The client or Adabas context definitions for the category you selected are listed in tree-view.

9 Click on the client or Adabas context name whose statistics you wish to view.

A panel appears in detail-view listing statistics about the client or Adabas context.

### **Dynamically Disconnecting Direct Clients**

### > To dynamically disconnect a direct client of a service:

Make sure you have accessed the System Management Hub and that the service is started. For complete information about starting services, read *Starting Adabas Administration Services*, elsewhere in this guide.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label.
- 7 Expand **Clients** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The client and Adabas context definitions for the service are listed in categories in tree-view. Two categories are listed: **Direct Clients** and **Adabas Contexts**.
- 8 Expand the **Direct Clients** category in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The client definitions are listed in tree-view.
- 9 Right-click on the name of the client you wish to disconnect and select **Disconnect** from the resulting drop-down menu.
  - A panel appears in detail-view requesting confirmation of the disconnect request.
- 10 Click **OK** to disconnect the selected client.

The client is disconnected.

### **Dynamically Deleting Adabas Contexts**

#### To dynamically delete an Adabas context of a service:

Make sure you have accessed the System Management Hub and that the service is started. For complete information about starting services, read *Starting Adabas Administration Services*, elsewhere in this guide.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label.
- 7 Expand **Clients** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The client and Adabas context definitions for the service are listed in categories in tree-view. Two categories are listed: **Direct Clients** and **Adabas Contexts**.
- 8 Expand **Adabas Contexts** category in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The Adabas context definitions for the service are listed in tree-view.
- 9 Right-click on the name of the Adabas context you wish to delete and select **Delete** from the resulting drop-down menu.
  - A panel appears in detail-view requesting confirmation of the deletion request.
- 10 Click **OK** to delete the selected Adabas context.
  - The Adabas context is deleted.

## **Dynamically Managing Service Client Hosts**

Client hosts are the host machines from which client requests are sent to the service. Adabas Administration Services lets you dynamically manage your service's interaction with client hosts.

This section covers the following topics:

- Listing Client Hosts
- Viewing Client Host Statistics
- Dynamically Disconnecting All Clients and Contexts of a Client Host

### **Listing Client Hosts**

#### > To dynamically list the client hosts of a service:

Make sure you have accessed the System Management Hub and that the service is started. For complete information about starting service, read *Starting Adabas Administration Services*, elsewhere in this guide.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label.
- 7 Expand **Client Hosts** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The client host definitions for the service are listed in tree-view.

### **Viewing Client Host Statistics**

### > To dynamically view statistics for a service client host:

Make sure you have accessed the System Management Hub and that the service is started. For complete information about starting service, read *Starting Adabas Administration Services*, elsewhere in this guide.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label.
- 7 Expand **Client Hosts** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The client host definitions for the service are listed in tree-view.
- 8 Click on the client host name whose statistics you wish to view.
  - A panel appears in detail-view listing statistics about the client host.

### Dynamically Disconnecting All Clients and Contexts of a Client Host

#### > To dynamically disconnect all the clients and context of a client host:

Make sure you have accessed the System Management Hub and that the service is started. For complete information about starting service, read *Starting Adabas Administration Services*, elsewhere in this guide.

1 Select the name of the managed host on which Adabas Administration Services is installed.

- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label.
- 7 Expand **Client Hosts** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The client host definitions for the service are listed in tree-view.
- 8 Right-click on the name of the client host whose clients and Adabas contexts you wish to disconnect and select **Disconnect all clients** from the resulting drop-down menu.
  - A panel appears in detail-view requesting confirmation of the disconnect request.
- 9 Click **OK** to disconnect all of the clients on the selected client host.
  - The clients and Adabas contexts are disconnected.

## **Shutting Down a Service**

#### > To shut down a service:

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.

4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.

The list of installed services appears.

5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.

The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.

In tree-view, right-click on the name of the service you want to shut down and select **Shutdown** command from the resulting drop-down menu.

A request to confirm that you want to shut down the service appears in detail-view.

7 Click **OK**.

The service is shut down.

## **Managing Adabas Administration Services Log Files**

You can view the current Adabas Administration Services log file or start a new one. This section describes both processes.

- Viewing the Service Log File
- Starting a New Adabas Administration Services Log File
- Specifying the Adabas Administration Services Log File Location

#### Viewing the Service Log File

#### > To view the log file for the Adabas Administration Services:

Make sure you have accessed the System Management Hub.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select in the tree-view under the managed host.

The Adabas Administration Services administration area of the System Management Hub becomes available to you.

4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.

The list of services appears.

In tree-view, right-click on the name of the service whose log file you want to view and select the **View Log File** command from the resulting drop-down menu.

The console log for the services appears in detail-view.

### Starting a New Adabas Administration Services Log File

You can close the current log file for an Adabas Administration Services and start a new one at any time. When you do this, the current log file (aas-svc.log) is saved under a new name and is cleared of all log entries. The name of the renamed log file is assigned in the format aas nnnnn.log, where nnnnn is an incremental number determined by the number of the most recent log file that was renamed and saved. The log file with the name that includes the highest number is the most recently saved log file.

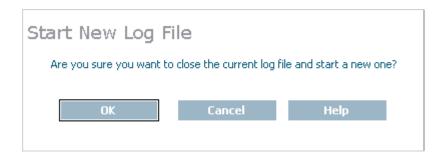
By default, Adabas Administration Services log files are stored in the *logsvc* directory in one of the following locations:

- In Windows 7 environments: ProgramData\Software AG\Entire Net-Work Server\logsvc75
- In UNIX environments: \$SAG\aas\.

If you would like to specify the location in which server log files should be stored, read *Specifying the Adabas Administration Services Log File Location*, elsewhere in this section.

#### To start a new log file for Adabas Administration Services:

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of services appears.
- In tree-view, right-click on the name of the service for which you want to start a new log file and select the **New Log File** command from the resulting drop-down menu.
  - The **Start New Log File** panel appears in detail-view.



#### 6 Click OK.

A new log file is started for Adabas Administration Services and the old one is closed.

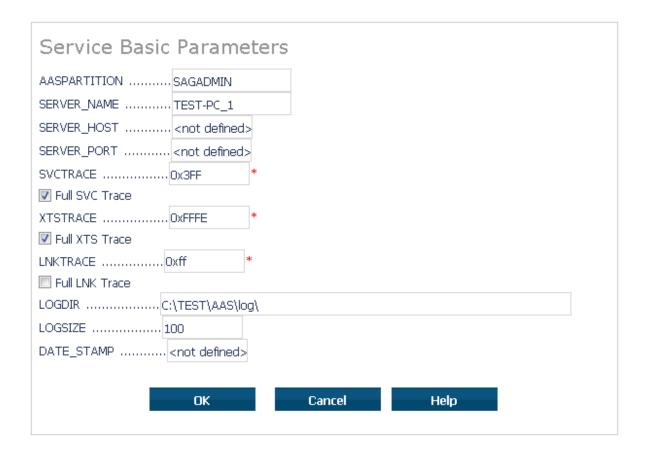
### Specifying the Adabas Administration Services Log File Location

You can specify the fully-qualified path of the directory in which log files should be stored. If you do not specify a log file location, the default location for Adabas Administration Services log files (the *logsvc* directory) will be used. This directory will be stored in one of the following locations:

- **In Windows 7 environments:** ProgramData\Software AG\Entire Net-Work Server\logsvc75
- In UNIX environments: \$SAG\wcp\.

### > To specify the log file location:

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select Adabas Administration Services in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label and then select the **Set Parameters Offline** node in tree-view.
  - The drop-down menu for setting service parameters offline appears in tree-view.
- In tree-view, right-click on **Set Parameters Offline** and select the **Set Basic Parameters** command from the resulting drop-down menu.
  - The **Service Basic Parameters** panel appears in detail-view.



7

8 Specify the fully-qualified path of the directory in which you want log files stored in the **LO-GDIR** parameter. When all parameters are set as you want, click **OK**.

The Adabas Administration Services parameters are updated.

## **Tracing Adabas Administration Services Processing**

There are three kinds of trace processing that can occur when using Adabas Administration Services:

- Traces can be performed for individual service processing.
- Traces can be performed for Software AG transport services processing (XTSTRACE).
- Traces can be performed for Software AG communications processing (ADALNK).

Tracing should be used only for problem analysis. When you specify trace levels, large trace files will be stored on your disks and performance will be affected. Therefore, we recommend that you perform this function only under the advisement of your Software AG technical support representative.

- Managing Service Tracing
- Managing Software AG Transport Services Tracing
- Managing Software AG Communications Tracing

#### Managing Service Tracing

Tracing should be used only for problem analysis. When you specify trace levels, large trace files will be stored on your disks and performance will be affected.



**Caution:** While you can set the trace level for a service using SMH, we recommend that you perform this function only under the advisement of your Software AG technical support representative.

You can set the trace level for a service dynamically (immediately and for only this execution of the service) or permanently (for future executions of the service). The dynamic trace level setting occurs immediately, but if the service is restarted, it is reset to the trace level specified in the service definition. The permanent trace level setting occurs in the service definition and takes effect only when the service is restarted.

This section covers the following topics:

- Permanently Setting the Trace Level
- Dynamically Setting the Trace Level

#### **Permanently Setting the Trace Level**

#### To set the trace level offline in SMH for the service:

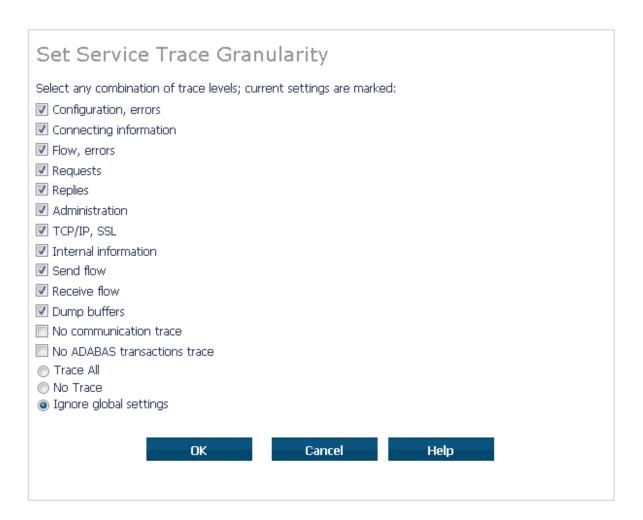
Make sure you have accessed the System Management Hub.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select Adabas Administration Services in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.

The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.

- Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label and then select the **Set Parameters Offline** node in tree-view.
- 7 In tree-view, right-click on **Set Parameters Offline** and select the **Set Service Trace Granularity** command from the resulting drop-down menu.

The **Set Service Trace Granularity** panel appears in detail-view.



8 Select appropriate trace levels as requested by your Software AG support representative.

The **Trace All**, **No Trace**, and **Ignore global settings** radio buttons are mutually exclusive selections. The **Trace All** and **No Trace** radio buttons are provided as *global* trace settings.

If you select **Trace All**, data is collected for all of the trace levels listed on the panel, regardless of what you have selected (checked).

- If you select the **No Trace** radio button, data is collected for *none* of the trace levels listed on the panel, regardless of what you have selected (checked).
- The **Ignore global settings** radio button *must* be selected if you want to collect trace data for only some of the trace levels listed on the panel. This ensures that neither the **Trace All** and **No Trace** radio buttons are selected and indicates to Adabas Administration Services that specific trace level data collection is requested.

#### 9 Click **OK**.

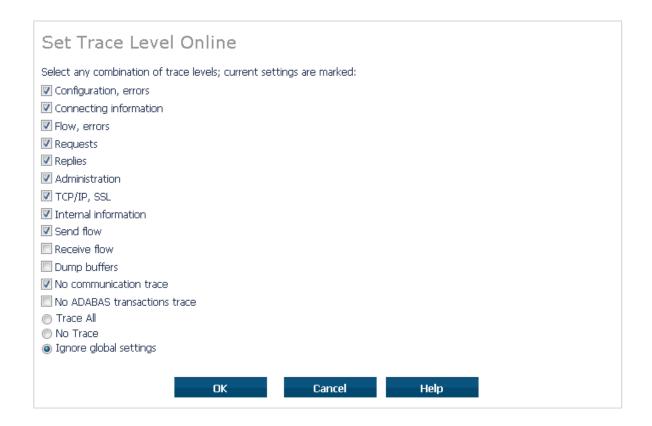
The trace level is set. You must restart the service in order for these trace level changes to take effect.

#### **Dynamically Setting the Trace Level**

#### > To dynamically set the trace level for the service:

Make sure you have accessed the System Management Hub.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand **Services** in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- In tree-view, right-click on the name of the service for which you want to set the trace level and select **Set Trace Level Online** command from the resulting drop-down menu.
  - The **Set Trace Level Online** panel appears in detail-view.



7 Select appropriate trace levels as requested by your Software AG support representative.

The **Trace All**, **No Trace**, and **Ignore global settings** radio buttons are mutually exclusive selections. The **Trace All** and **No Trace** radio buttons are provided as *global* trace settings.

- If you select **Trace All**, data is collected for all of the trace levels listed on the panel, regardless of what you have selected (checked).
- If you select the **No Trace** radio button, data is collected for *none* of the trace levels listed on the panel, regardless of what you have selected (checked).
- The **Ignore global settings** radio button *must* be selected if you want to collect trace data for only some of the trace levels listed on the panel. This ensures that neither the **Trace All** and **No Trace** radio buttons are selected and indicates to Adabas Administration Services that specific trace level data collection is requested.

#### 8 Click OK.

The trace level is set. You must stop and restart the service in order for these settings to take effect.

### Managing Software AG Transport Services Tracing

Tracing should be used only for problem analysis. When you specify trace levels, large trace files will be stored on your disks and performance will be affected.



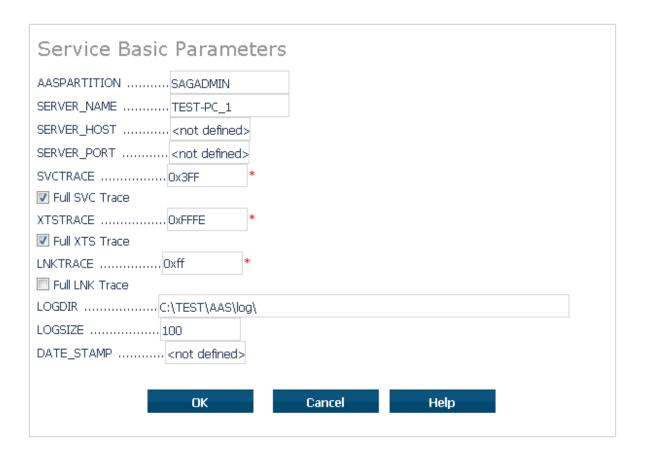
**Caution:** We recommend that you perform this function only under the advisement of your Software AG support representative.

Once Software AG transport services tracing is activated, the trace messages are written to the Adabas Administration Services log file. For more information about the Adabas Administration Services log file, read *Managing Adabas Administration Services Log Files*, elsewhere in this guide.

#### > To set the Software AG transport services trace level and activate transport services tracing:

Make sure you have accessed the System Management Hub.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand Services in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- 6 Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label and then select the **Set Parameters Offline** node in tree-view.
- In tree-view, right-click on **Set Parameters Offline** and select the **Set Basic Parameters** command from the resulting drop-down menu.
  - The **Service Basic Parameters** panel appears in detail-view.



Modify the **XTSTRACE** parameter and **Full XTS Trace** checkbox on the **Service Basic Parameters** panel, as requested by your Software AG technical support representative. These parameters are described in the following table. When all parameters are set as you want, click **OK** to save them.

Parameter	Description
XTSTRACE	Set the XTS trace level using this parameter.
	Click in this checkbox to set the XTSTRACE value to obtain full tracing of Software AG transport services processing. Do not check this checkbox unless specifically instructed to do so by a Software AG technical support representative. If you do, your installation could be overrun with trace messages that would be meaningless to you and would likely affect system performance.

The transport services trace levels are set and activated.

### Managing Software AG Communications Tracing

Tracing should be used only for problem analysis. When you specify trace levels, large trace files will be stored on your disks and performance will be affected.



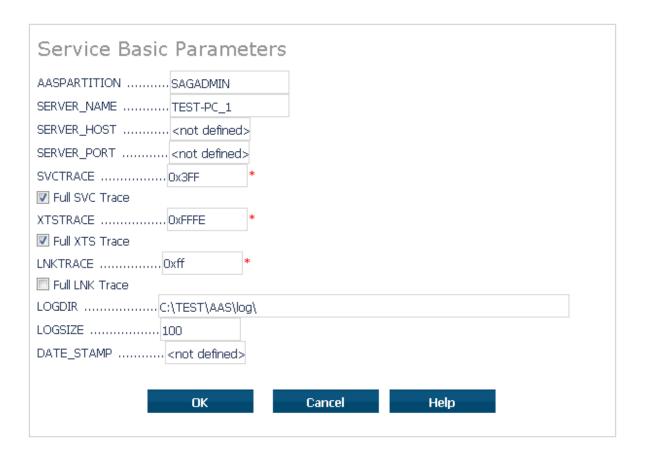
**Caution:** We recommend that you perform this function only under the advisement of your Software AG support representative.

Once Software AG communications tracing is activated, the trace messages are written to the Adabas Administration Services log file. For more information about the Adabas Administration Services log file, read *Managing Adabas Administration Services Log Files*, elsewhere in this guide.

#### To set the Software AG communications trace level and activate communications tracing:

Make sure you have accessed the System Management Hub.

- 1 Select the name of the managed host on which Adabas Administration Services is installed.
- 2 Expand the tree-view frame for the managed host by clicking on the plus sign (+) to the left of its name.
- 3 Select **Adabas Administration Services** in the tree-view under the managed host.
  - The Adabas Administration Services administration area of the System Management Hub becomes available to you.
- 4 Expand Services in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The list of installed services appears.
- 5 Expand the name of a service in the server list in tree-view, by clicking on the plus sign (+) to the left of its label.
  - The databases, clients, and client hosts that are supported by the service are listed in groups in tree-view, as well as access to the offline service parameters you can set. In addition, details about the selected service are displayed in detail-view.
- Expand the specific service name in tree-view, by clicking on the plus sign (+) to the left of its label and then select the **Set Parameters Offline** node in tree-view.
- In tree-view, right-click on **Set Parameters Offline** and select the **Set Basic Parameters** command from the resulting drop-down menu.
  - The **Service Basic Parameters** panel appears in detail-view.



Modify the LNKTRACE parameter and Full LNK Trace checkbox on the Service Basic Parameters panel, as requested by your Software AG technical support representative. These parameters are described in the following table. When all parameters are set as you want, click **OK** to save them.

Parameter	Description
LNKTRACE	Set the ADALNK trace level using this parameter.
Full LNK Trace	Click in this checkbox to set the LNKTRACE value to obtain full tracing of ADALNK processing. Do not check this checkbox unless specifically instructed to do so by a Software AG technical support representative. If you do, your installation could be overrun with trace messages that would be meaningless to you and would likely affect system performance.

The communications trace levels are set and activated.

## 6 Using the aasutil Batch Program

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The *aasutil.exe* batch utility program allows you to perform Adabas Administration Services administration functions in a batch environment on the Adabas Administration Services installed on the local machine. The *aasutil.exe* program can be found in the */bin* directory wherever Adabas Administration Services is installed.

This chapter covers the following topics:

### Syntax for Starting the Utility

The syntax of the *aasutil.exe* batch program is:

```
aasutil [help=yes]
```

This command should be entered on the command prompt after switching to the */bin* directory wherever Adabas Administration Services is installed.

After entering this command, the utility is started and the following instructions are displayed, prompting you to make a selection:

```
Software AG Adabas Administration Service 2.1 Utility Program
(c) Copyright Software AG 1998-2014. All Rights Reserved.
USAGE: aasutil [trace=tracevalue (0-65534)] [help=yes]
Adabas Administration Service URL
TCPIP://AMV76402:49155?AASSERVICE=ON&Version=2.1.0.0
AMV76402_1 is Active
Please, choose one of the following functions:
(1) List Adabas Administration Service parameters
(2) Show service statistics
(3) List all databases
(4) Show a database statistics
(5) List listens
(6) List all clients
(7) Show a client statistics
(8) Stop a client
(9) Stop all clients
(10) List all ADABAS contexts
(11) Show a context statistics
(12) Delete a context
(13) Delete all contexts
(14) List all hosts
(15) Show a host statistics
(16) Disconnect a host
(17) Shutdown this service
(18) Exit this utility
```

### **Getting Help**

To get help with the *aasutil.exe* batch program, enter the following command prompt after switching to the */bin* directory wherever Directory Server is installed:

aasutil help=yes

Help for the *aasutil.exe* batch program displays on the screen.

### **Exiting the Utility**

- > To exit the *aasutil.exe* batch program, complete the following steps:
- Enter an "18" at the utility prompt to select function 8 (Exit this utility).

  The utility stops.

### **Listing Adabas Administration Services Parameters**

- > To list the parameters in the configuration file for this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "1" at the utility prompt to select function 1 (List Adabas Administration Services parameters).

A list of all parameters the Adabas Administration Services configuration file, *sagadmin.config*, displays on the screen.

### **Displaying Adabas Administration Services Statistics**

- To display statistics for this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "2" at the utility prompt to select function 2 (Show service statistics).

  Statistics associated with the Adabas Administration Services display on the screen.

### Listing Databases Registered by this Adabas Administration Services

- > To list databases registered by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "3" at the utility prompt to select function 3 (List all databases).

A list of all databases registered by this Adabas Administration Services displays on the screen.

## Displaying Statistics for a Database Registered by this Adabas Administration Services

- To display statistics for a database registered by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "4" at the utility prompt to select function 4 (Show a database statistics).
  - You are prompted to enter a database ID (DBID).
- 3 Enter a DBID at the utility prompt.
  - Statistics for the database display on the screen.
  - Statistics for all databases registered by this Adabas Administration Services display on the screen.

## Listing Listens Performed by this Adabas Administration Services

- To list the listens performed by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "5" at the utility prompt to select function 5 (List listens).
  - Listen statistics for this Adabas Administration Services display on the screen.

### Listing Clients Registered by this Adabas Administration Services

- > To list the clients registered by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "6" at the utility prompt to select function 6 (List all clients).

A list of the clients registered by this Adabas Administration Services displays on the screen.

## Displaying Statistics for a Client Registered by this Adabas Administration Services

- To display statistics for a client registered by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "7" at the utility prompt to select function 7 (Show a client statistics).
  - You are prompted to enter a client ID.
- 3 Enter a client ID at the utility prompt.
  - Statistics for the client display on the screen.

### Stopping a Client Registered by this Adabas Administration Services

- > To stop a client registered by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "8" at the utility prompt to select function 8 (Stop a client).
  - You are prompted to enter a client ID.
- 3 Enter a client ID at the utility prompt.
  - The selected client is stopped.

### Stopping All Clients Registered by this Adabas Administration Services

- To stop all clients registered by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- Enter a "9" at the utility prompt to select function 9 (Stop all clients).All clients registered to this Adabas Administration Services are stopped.

## Listing All Adabas Contexts Registered by this Adabas Administration Services

- > To list all Adabas contexts registered by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "10" at the utility prompt to select function 10 (Stop all Adabas contexts).
  All Adabas contexts registered to this Adabas Administration Services display on the screen.

# Displaying Statistics for an Adabas Context Registered by this Adabas Administration Services

- > To display statistics for a context registered by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "11" at the utility prompt to select function 11 (Show a context statistics).
  - You are prompted to enter a context ID.
- 3 Enter a context ID at the utility prompt.
  - Statistics for the context display on the screen.

## Deleting an Adabas Context Registered by this Adabas Administration Services

- > To delete an Adabas context registered by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "12" at the utility prompt to select function 12 (Delete a context).
  - You are prompted to enter a context ID.
- 3 Enter a context ID at the utility prompt.
  - The selected context is deleted.

## Deleting All Adabas Contexts Registered by this Adabas Administration Services

- > To delete all Adabas contexts registered by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "13" at the utility prompt to select function 13 (Delete all contexts).
  - The contexts are deleted.

### Listing All Hosts Registered by this Adabas Administration Services

- To list all hosts registered by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "14" at the utility prompt to select function 14 (List all hosts).
  - A list of the hosts registered by this Adabas Administration Services displays on the screen.

## Displaying Statistics for a Host Registered by this Adabas Administration Services

- To display statistics for a host registered by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "15" at the utility prompt to select function 15 (Show a host statistics).
  - You are prompted to enter a host ID.
- 3 Enter a host ID at the utility prompt.
  - Statistics for the host display on the screen.

### Disconnecting a Host Registered by this Adabas Administration Services

- To display statistics for a host registered by this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "16" at the utility prompt to select function 16 (Disconnect a host).
  - You are prompted to enter a host ID.
- 3 Enter a host ID at the utility prompt.
  - The selected host is disconnected.

### **Shutting Down this Adabas Administration Services**

- To shut down this Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section.
- 2 Enter a "17" at the utility prompt to select function 17 (Shutdown this service).
  - The Adabas Administration Services is shut down.

## 7 Using the adjutil Batch Program

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The Directory Server utility program, *adiutil.exe*, allows you to detect Directory Servers on the host machine and to obtain lists of databases, Adabas Administration Servicess, and Adabas Manager Communication Clients registered in a Directory Server. This utility can also be used to change the Directory Server used by the local Adabas Administration Services. The *adiutil.exe* program can be found in the */bin* directory wherever Adabas Administration Services is installed.

By default, the Directory Server host and port are the values defined in the local Adabas Administration Services configuration file, *sagadmin.config*. If you want to use a different Directory Server, specify the host and port parameters on the *adiutil.exe* batch program.

This chapter covers the following topics:

### Syntax for Starting the Utility

The syntax of the *adiutil.exe* batch program is:

```
adiutil [host=hostname port=portnum] [help=yes]
```

This command should be entered on the command prompt after switching to the */bin* directory wherever Adabas Administration Services is installed.

By default, the Directory Server host and port are the values defined in the local Adabas Administration Services configuration file, *sagadmin.config*. If you want to use a different Directory Server, use the host and port parameters to specify the host name and port number of the machine on which the other Directory Server is installed.

After entering this command, the utility is started and the following instructions are displayed, prompting you to make a selection:

```
Please, choose one of the following functions:
(1) Find a Directory Server
(2) Check if a Directory Server is active by host and port
(3) List all databases registered by Adabas Administration Services
(4) List the databases registered by a specific Adabas Administration Service
(5) List all Adabas Administration Services
(6) List all Adabas Manager Communicators
(7) Change the Directory Server for the local Adabas Administration Service
(8) Exit the utility:
```

### **Getting Help**

To get help with the *adiutil.exe* batch program, enter the following command prompt after switching to the */bin* directory wherever Directory Server is installed:

adiutil help=yes

Help for the adiutil.exe batch program displays on the screen.

### **Exiting the Utility**

- To exit the adiutil.exe batch program, complete the following steps:
- Enter an "8" at the utility prompt to select function 8 (Exit the utility).

  The utility stops.

### **Locating an Active Directory Server**

- > To locate an active Directory Server using the adiutil.exe batch program, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section, if you want to locate a Directory Server on the machine defined in the local Adabas Administration Services configuration file, *sagadmin.config*.

Or:

Start the utility, specifying an alternate host name and port number, as described in *Syntax for Starting the Utility*, elsewhere in this section, if you want to locate a Directory Server on a remote machine (in a remote Adabas Administration Services configuration file).

2 Enter a "1" at the utility prompt to select function 1 (Find a Directory Server).

A list of active Directory Servers found by the utility displays on the screen.

The utility locates active Directory Servers by searching the following system elements, using the following search order:

- 1. The utility searches the local configuration file (file *sagadmin.config*).
- 2. The utility searches for an XTSDSURL environment variable setting.

- 3. The utility searches for the SAGXTSDSHOST AND SAGXTSDDSPORT DNS entries.
- 4. The utility searches the local machine for port 4952.

### **Determining If a Directory Server is Active**

- To determine whether a Directory Server is active using the *adjutil.exe* batch program, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section, if you want to determine whether the Directory Server defined in the local Adabas Administration Services configuration file, *sagadmin.config*, is active.

Or:

- Start the utility, specifying an alternate host name and port number, as described in *Syntax for Starting the Utility*, elsewhere in this section, if you want to determine whether a Directory Server on a remote machine (in a remote Adabas Administration Services configuration file) is active.
- 2 Enter a "2" at the utility prompt to select function 2 (Check if a Directory Server is active by host and port).

A single sentence indicating whether the Directory Server is active or not displays on the screen.

### Listing Databases Registered by All Adabas Administration Servicess

- To list databases registered by all Adabas Administration Servicess, complete the following steps:
- Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section, if you want to list databases registered by all Adabas Administration Servicess in the Directory Server defined in the local Adabas Administration Services configuration file, *sagadmin.config*.

Or:

Start the utility, specifying an alternate host name and port number, as described in *Syntax for Starting the Utility*, elsewhere in this section, if you want to list databases registered by all Adabas Administration Servicess in a remote Directory Server (in a remote Adabas Administration Services configuration file).

2 Enter a "3" at the utility prompt to select function 3 (List all databases registered by Adabas Administration Servicess).

A list of all databases registered by all Adabas Administration Servicess displays on the screen.

### Listing Databases Registered by a Specific Adabas Administration Services

- > To list databases registered by a specific Adabas Administration Services, complete the following steps:
- Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section, if you want to list databases registered by a specific Adabas Administration Services in the Directory Server defined in the local Adabas Administration Services configuration file, *sagadmin.config*.

Or:

Start the utility, specifying an alternate host name and port number, as described in *Syntax for Starting the Utility*, elsewhere in this section, if you want to list databases registered by a specific Adabas Administration Services in a remote Directory Server (in a remote Adabas Administration Services configuration file).

2 Enter a "4" at the utility prompt to select function 4 (List all databases registered by a specific Adabas Administration Services).

You are prompted to supply the server name of the specific Adabas Administration Services.

3 Enter the server name of the specific Adabas Administration Services.

A list of all databases registered by the specific Adabas Administration Services displays on the screen.

### **List all Registered Adabas Administration Servicess**

- To list all Adabas Administration Servicess registered to an Directory Server, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section, if you want to list Adabas Administration Servicess registered by the Directory Server defined in the local Adabas Administration Services configuration file, *sagadmin.config*.

Or:

Start the utility, specifying an alternate host name and port number, as described in *Syntax for Starting the Utility*, elsewhere in this section, if you want to list Adabas Administration

- Servicess registered by a remote Directory Server (in a remote Adabas Administration Services configuration file).
- 2 Enter a "5" at the utility prompt to select function 5 (List all Adabas Administration Servicess).

A list of all Adabas Administration Servicess registered by the Directory Server displays on the screen.

### **List all Registered Adabas Manager Communication Clients**

- > To list all Adabas Manager Communication Clients registered to an Directory Server, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section, if you want to list Adabas Manager Communication Clients registered by the Directory Server defined in the local Adabas Administration Services configuration file, *sagadmin.config*.

Or:

- Start the utility, specifying an alternate host name and port number, as described in *Syntax for Starting the Utility*, elsewhere in this section, if you want to list Adabas Manager Communication Clients registered by a remote Directory Server (in a remote Adabas Administration Services configuration file).
- 2 Enter a "6" at the utility prompt to select function 6 (List all Adabas Manager Communication Clients).

A list of all Adabas Manager Communication Clients registered by the Directory Server displays on the screen.

### Changing the Directory Server for the Local Adabas Administration Services

- To change the Directory Server for the local Adabas Administration Services, complete the following steps:
- 1 Start the utility, as described in *Syntax for Starting the Utility*, elsewhere in this section, if you want to change the Directory Server used by the local Adabas Administration Services (in the local Adabas Administration Services configuration file, *sagadmin.config*).
- 2 Enter a "7" at the utility prompt to select function 7 (Change the Directory Server for the local Adabas Administration Services).
  - You are prompted to enter the host name of the Directory Server to which you would like to switch.

- 3 At the prompt, enter the host name of the Directory Server to which you would like to switch.
  - You are prompted to enter the port number of the Directory Server to which you would like to switch.
- 4 At the prompt, enter the port number of the Directory Server to which you would like to switch.
  - You are prompted to verify that you want to make the change.
- 5 At the prompt, enter the "y" (Yes) to make the change or "n" (No) to void the change.
  - If you enter "y", the Directory Server used by the local Adabas Administration Services is changed; if you enter "n", no change is made.

## 8 Port Number Reference

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This chapter describes the ports that are needed by Adabas LUW and Entire Net-Work LUW products to perform its processing and how they can be assigned.

### **Port Overview and General Assignments**

The following table describes the ports that are needed by Entire Net-Work to perform its processing and any default ports assumed by Entire Net-Work. You should consider avoiding the use of these default port numbers for other applications.

Software AG Product Component	Ports Needed	Default Port Number
Adabas Manager Communication Client	One port is needed.	4980
Software AG Directory Server	One port is needed for Entire Net-Work requests to the Directory Server	4952 (IANA port)  Note: If older versions of Entire
		Net-Work (older than 7.3) are in use, this port number may need to be changed to 12731.
Entire Net-Work Administration LUW	One port is needed for System Management Hub (SMH) administration tasks	dynamically assigned
Entire Net-Work Kernel	A port is needed for Kernel access by clients	dynamically assigned
	A port is needed for Kernel access via e-business connections (Entire Net-Work 7 or later)	dynamically assigned
	A port is needed for Kernel access via classic RDA connections (Entire Net-Work 2)	7869
	A port is needed for System Management Hub (SMH) administration of Kernels	dynamically assigned

Software AG has registered port number 4952 with the Internet Assigned Numbers Authority (IANA) for use by the Software AG Directory Server. For more information about Directory Server port number specifications, read *The Directory Server Port Number* in the *Software AG Directory Server Installation and Administration Guide*. For information on changing the Directory Server port number for an Entire Net-Work installation, read *Changing the Software AG Directory Server Port Number*.

In general, there are no default port numbers assigned to Entire Net-Work Kernels or clients. These are dynamically assigned by Entire Net-Work when the Kernel or client is started, unless you specify a specific port or range of ports to use when you define the Kernel or client. If you set the port number to "0", the Entire Net-Work will dynamically assign a port.

Port numbers are dynamically assigned by Entire Net-Work when the Kernel or client is started, as follows:

- Entire Net-Work searches for the first available port starting from port 49152 through 65535. (The starting search port number, 49152, is the IANA-recommended value from which to start.).
- Once an available port number is found, it is assigned to the Kernel or client in its Software AG Directory Server entry.

While defining Entire Net-Work Kernels, you can also select a specific port or specify a range or list of port numbers that Entire Net-Work should search during the process in which it dynamically assigns a port to the Kernel:

- To specify a specific port number, enter the number in the port number field when you define the Kernel.
- To specify a range of port numbers that Entire Net-Work should search to dynamically assign a port, list the starting and ending ports in the port number field when you define the Kernel, separated by a dash (-). For example, a specification of "9010-9019" would cause Entire Net-Work to search for the first available port between and including port numbers 9010 and 9019.
- To specify a list of port numbers that Entire Net-Work should search to dynamically assign a port, list the port numbers in the port number field when you define the Kernel, separated by commas (,). For example, a specification of "9010,9013,9015,9017,9019" would cause Entire Net-Work to search for the first available port from this list of ports, starting with port 9010 and working from left to right through the list.
- You can, of course, combine search ranges and lists in a port number field. For example, a specification of "9010-9019,10020,10050-10059" would cause Entire Net-Work to search for the first available port first in the 9010-9019 range (inclusive), then port 10020, and finally in the 10050-10059 range (inclusive). The first available port that Entire Net-Work encounters would be used for the Kernel.

If no available port is found in a specified range or list, an error occurs.

For more information about adding Kernels, read Adding Kernel Configuration Definitions in the Entire Net-Work Server LUW Installation and Administration Guide.

### **Changing the Software AG Directory Server Port Number**

- If you need to change the Directory Server port number for your installation, follow these steps:
- Within the settings for Entire Net-Work Client and any client configurations definitions, change all specifications for the Directory Server port number to the new port number you want to use. Directory Server port numbers can be changed for Entire Net-Work Client and the client configurations using the System Management Hub (SMH), as follows:

- 1. Start up SMH and access the Entire Net-Work Client SMH administration area. For more information about the Entire Net-Work Client SMH administration area, read *The Entire Net-Work Client SMH Administration Area*, in the *Entire Net-Work Client Installation and Administration Guide*.
- 2. Right-click on the name of a client machine listed under **Clients** in the Entire Net-Work Client SMH administration area.
- 3. Select the **Set Parameters** command from the drop-down menu that appears.
  - The **Set Client Parameters** panel appears in detail-view. For complete information about this screen, read *Setting Client Parameters*, in the *Entire Net-Work Client Installation and Administration Guide*.
- 4. On the **Set Client Parameters** panel, change the Directory Server port number to the new port number you want to use in the SAGXTSDSPORT field.
- 5. On the **Set Client Parameters** panel, click on **Update all Client Configurations**. A check mark should appear for this option.
- 6. Click **OK** to save the settings for the client machine and all of the client configurations associated with it.
- Within the settings for Entire Net-Work Server and any Kernels definitions, change all specifications for the Directory Server port number to the new port number you want to use. These port numbers can be changed using the System Management Hub (SMH), as follows:
  - 1. Start up SMH and access the Entire Net-Work Server SMH administration area. For more information about the Entire Net-Work Server SMH administration area, read *The Entire Net-Work Server SMH Administration Area*, in the *Entire Net-Work Server LUW Installation and Administration Guide*.
  - 2. Right-click on the name of an Entire Net-Work Server listed under **Servers** in the Entire Net-Work Server SMH administration area.
  - 3. Select the **Set Server Parameters** command from the drop-down menu that appears.
    - The **Server Parameters** panel appears in detail-view. For complete information about this screen, read *Setting Server Parameters*, in the *Entire Net-Work Server LUW Installation and Administration Guide*.
  - 4. On the **Server Parameters** panel, change the Directory Server port number to the new port number you want to use in the SAGXTSDSPORT field.
  - 5. On the **Server Parameters** panel, click on **Update all Kernels**. A check mark should appear for this option.
  - 6. Click **OK** to save the settings for the server and all of the Kernels associated with it.

- 3 Shut down the Entire Net-Work Client service or daemon and the Entire Net-Work Server service or daemon, as appropriate. Be sure to shut down every Kernel associated with the server as well.
  - For information on shutting down the Entire Net-Work Client service or daemon, read *Stopping Entire Net-Work Client* in the *Entire Net-Work Client Installation and Administration Guide*. For information on shutting down the Entire Net-Work Server service or daemon, read *Stopping Entire Net-Work Server* in the *Entire Net-Work Server LUW Installation and Administration Guide*.
- 4 Shut down the Directory Server service or daemon.
  - For information on shutting down the Directory Server service or daemon, read *Starting and Stopping the Software AG Directory Server*, in the *Software AG Directory Server Installation and Administration Guide*.
- 5 Modify the Directory Server installation, as appropriate for the operating system. When prompted, change the Directory Server port number to the new port number you want to use.
- 6 Start up the Directory Server service or daemon, if it is not automatically started after its installation was modified.
  - For information on starting up the Directory Server service or daemon, read *Starting and Stopping the Software AG Directory Server*, in the *Software AG Directory Server Installation and Administration Guide*.
- 7 Start up the Entire Net-Work Client service or daemon and the Entire Net-Work Server service or daemon.

For information on starting up the Entire Net-Work Client service or daemon, read Manually Starting Entire Net-Work Client in the Entire Net-Work Client Installation and Administration Guide. For information on starting up the Entire Net-Work Server service or daemon, read Manually Starting Entire Net-Work Server in the Entire Net-Work Server LUW Installation and Administration Guide.

### **About System Management Hub Ports**

For information about any System Management Hub installation issues, including port number settings, read *Installing webMethods Products* in Empower.

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